

IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (currently amended): A process of dewatering an aqueous suspension employing a flocculating system comprising

i.) treating the suspension with a flocculating amount of a first flocculant and a dewatering amount of a second flocculant,

and

ii.) subjecting the suspension to mechanical dewatering to form a cake, wherein the first flocculant brings about flocculation and assists thickening of the suspension and the second flocculant further dewatering the suspension,

characterised in that the second flocculant is a water-soluble or water swellable polymer that is mixed into the suspension in the form of an aqueous composition comprising dissolved or hydrated polymer having a Brookfield viscosity of at least 400,000 cps (measured at 20°C, RVT viscometer, spindle 6, 1rpm) and with the proviso that the second flocculant is not a Mannich polyacrylamide or a quaternized Mannich polyacrylamide.

2. (original): A process according to claim 1 in which the aqueous suspension is sewage sludge.

3. (previously presented): A process according to claim 1 in which the mechanical dewatering employs an apparatus selected from the group consisting of belt press, filter press, screw press and centrifuge.

4. (previously presented): A process according to claim 1 in which the second flocculant has a polymer concentration above 2% by weight.

5. (previously presented): A process according to claim 1 in which the second flocculant has a Brookfield viscosity of between 400,000 and 800,000 cps (measured at 20°C, RVT viscometer, spindle 6, 1rpm).

6. (previously presented): A process according to claim 1 in which the second flocculant is cationic.

7. (previously presented): A process according to claim 1 in which the second flocculant and is formed from at least 30 % by weight cationic monomer or monomers.

8. (previously presented): A process according to claim 1 in which the second flocculant is selected from the group consisting of cationic polyacrylamides, polymers of dialkyl diallyl ammonium chloride, dialkyl amino alkyl (meth) -acrylates (or salts thereof) and dialkyl amino alkyl (meth)-acrylamides (or salts thereof).

9. (previously presented): A process according to claim 1 in which the second flocculant has an intrinsic viscosity of at least 0.5 dl/g.

10. (currently amended): A process according to claim 1 in which the second flocculant is selected from the group consisting of,

- i) a polymer formed from 50 to 100% by weight methyl chloride quaternary ammonium salt of dimethyl amino ethyl (meth) acrylate and 0 to 20% by weight acrylamide of intrinsic viscosity between 4 and 10 dl/g,
- ii) polyvinyl amidine and polyvinyl amines of intrinsic viscosity greater than 1 dl/g,
- iii) ~~quaternised salts of Mannich addition polyacrylamides of intrinsic viscosity greater than 1 dl/g, and~~
- iv) poly dimethyl diallyl ammonium chloride of intrinsic viscosity greater than 0.5 dl/g.

11. (previously presented): A process according to claim 1 in which the first flocculant is a cationic organic polymer.

12. (currently amended): A process according to claim 11 in which the cationic organic polymer is selected from the group consisting of acrylamide polymers, polyvinyl amidine, polyvinyl amine, poly dimethyl diallyl ammonium chloride, poly amines, and polyethyleneimines, ~~Mannich polyacrylamides and quaternised Mannich polyacrylamides~~.

13. (previously presented): A process according to claim 1 in which the first flocculant and second flocculant are added substantially simultaneously.

14.(previously presented): A process according to claim 1 in which the first flocculant and second flocculant are combined into a single composition.

15. (currently amended): A method for dewatering an aqueous suspension, comprising adding an aqueous flocculant composition to the aqueous suspension wherein the composition comprises a water-soluble or water swellable polymer which is dissolved or hydrated, characterised in that the aqueous composition has a Brookfield viscosity of above 400,000 cps (measured at 20°C, RVT viscometer, spindle 6, 1rpm)

and

subjecting the suspension to mechanical dewatering with the proviso that the aqueous flocculant is not a Mannich polyacrylamide or a quaternized Mannich polyacrylamide.

16. (previously presented): A process according to claim 1 in which the second flocculant has a polymer concentration between 5 and 20 % by weight.

17. (previously presented): A process according to claim 1 in which the second flocculant has an intrinsic viscosity of at least 4 to 10 dl/g.

18. (new): A process according to claim 1 in which the second flocculant is mixed into the suspension using conventional mixing equipment.

19. (new): A process according to claim 1 in which the mechanical dewater is compression dewatering.